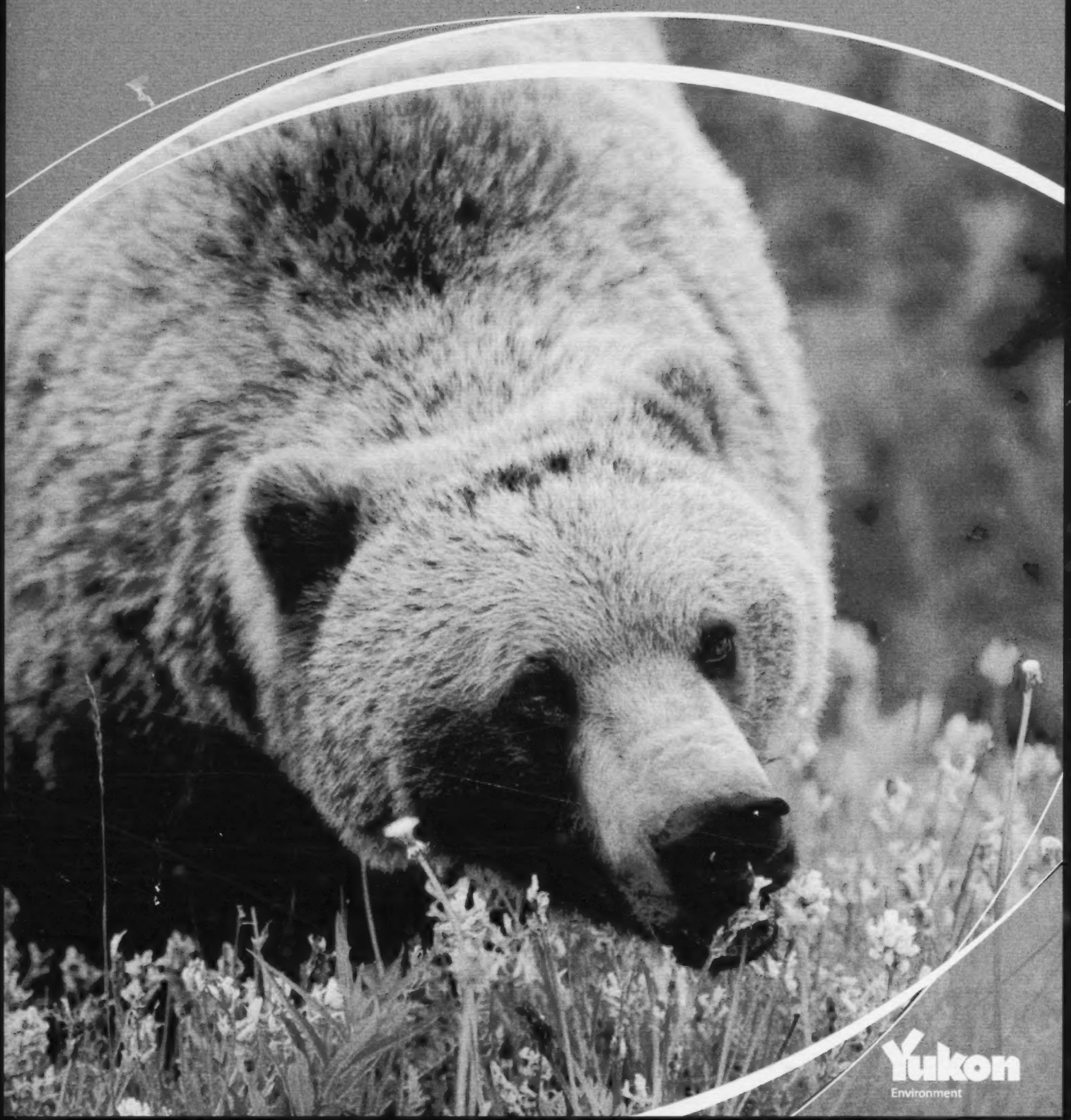
Fish and Wildlife Branch Highlights 2012



Yukon
Environment

Contents

Introduction	2
The Yukon Conservation Data Centre	4
Wildlife Viewing Program	8
Ungulate Surveys	10
Southern Lakes Grizzly Bear Study	12
Three Moose Surveys Conducted in 2012	14
Burbot Studies Reveal a Problem in Pine Lake	16
Fish Stocking at Hidden Lakes	18
Technical reports	20

© 2013 Environment Yukon

ISBN: 978-1-55362-544-5

Photos: Government of Yukon unless otherwise noted.

Copies available from:
Environment Yukon
Fish and Wildlife Branch, V-5A
P.O. Box 2703, Whitehorse, Yukon Y1A 2C6
Phone (867) 667-5721, Fax (867) 393-6263
Email: environmentyukon@gov.yk.ca

Also available online at:
www.env.gov.yk.ca

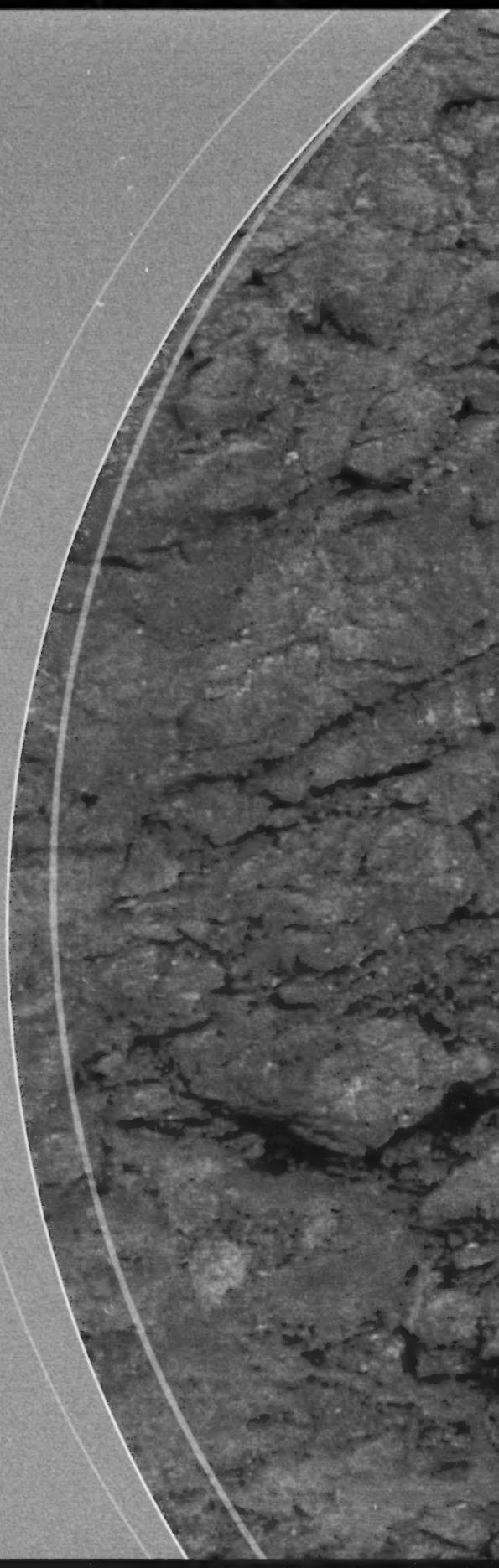
This year's Fish and Wildlife Branch report highlights the roles we play to take Environment Yukon's Mission Statement from words to actions.

We foster informed, inclusive decision making, generate and share knowledge, and guide others to act responsibly and respectfully in their interactions with the environment. We strive to safeguard Yukon's ecosystems.

Inventory surveys, whether for moose, fish, grizzly bears, or the habitats that are their home, are the central part of the knowledge we generate. With renewed mineral staking activity throughout much of Yukon, especially within the range of the Klaza caribou herd, we are gathering current information about the herd's movements, distribution, and habitat use to help us make good recommendations in the environmental assessment processes. Moose surveys provide key information not only for harvest management discussions but also for environmental assessments. Read on to learn about these field activities and more.

Much of wildlife management happens away from the field. In community halls and meeting rooms across the territory, Environment Yukon comes together with members of boards, councils, and other interested Yukoners to develop management plans and work plans that reflect community needs and conservation concerns. It is in these venues, as we come to a common understanding of issues and solutions, that we generate and share knowledge. Through the hard work and participation of many, we were able to conclude several important initiatives in 2012. The mandate of the Southern Lakes Wildlife Co-ordinating Committee concluded with the release of the Regional Assessment of Wildlife in the Yukon Southern Lakes Area. And, to the north, the community-based workplan for the Little Salmon Carmacks Traditional Territory was renewed. The Wolf Conservation and Management Plan, Aishihik Bison Management Plan, and the international Chisana Caribou Management Plan were all adopted following extensive public consultation and collaboration.

Making our information accessible is an ongoing priority for the Fish and Wildlife Branch. If you would like more information about any of the projects or plans mentioned here, it is available on Environment Yukon's website: **www.env.gov.yk.ca.**



The Yukon Conservation Data Centre

Podistera yukonensis is currently being assessed by COSEWIC. Photo: Syd Cannings

The Yukon Conservation Data Centre (CDC) is a repository for information about all wild Yukon species. That includes mammals, birds, fishes, amphibians, invertebrates, lichens, and plants. The Yukon CDC gathers detailed information on species of conservation concern that may not be available elsewhere. The Centre is part of a network of conservation data centres from across Canada, throughout the United States, the Caribbean, and Central and South America.

In 2012, the Yukon CDC focused on adding all available information to the Centre's BIOTICS database about species that the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has either assessed as being at risk in Canada or is currently assessing their conservation status. Once that task was completed, the Yukon CDC entered recently collected data and, finally, historical data. In many cases, information about Yukon plants and animals has been stored in any of a number of collections outside Yukon. In 2012, the Yukon CDC retrieved records of Yukon species from the University of Alaska Museum of the North, the Canadian Museum of Nature, the Department of Agriculture and Agrifood Canada, the Kluane National Park Herbarium, the Royal BC Museum, and the University of Alberta. All told, more than a thousand new taxa were added to the database, bringing the total number of animals, plants, and lichens known to live in Yukon to 4,776.

Just collecting and listing the information is not enough. Each species has to be assigned a conservation rank that indicates the level of conservation concern here in Yukon. This year, the focus was on birds. The Yukon CDC organized a Yukon bird-ranking workshop, and the resulting updated ranks and justifications were added to the BIOTICS database.

Previous conservation ranks have to be reviewed and updated as new information becomes available. The Yukon CDC reviewed/changed ranks of 1707 species in 2012; of which 957 were previously unranked. For example, Yukon Podistera, a plant with 87% of its range in Yukon, had its rank changed from Globally Imperilled (G2) to Globally Vulnerable (G3) after the discovery of several new populations.

Available online, *Yukon Species at Risk 2011* is a new publication, full of photos, maps, and interesting facts about species assessed as at risk nationally that

Podistera yukonensis
Photo: Bruce Bennett

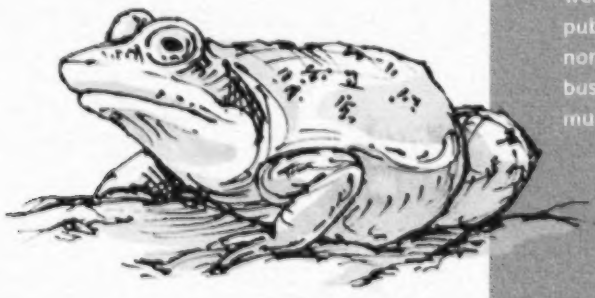
The Yukon CDC tracks species of conservation concern throughout Yukon.

occur in Yukon. Readers can also learn about the assessment process and, perhaps most importantly, what they can do locally to help conserve our rare and endangered species.

In the spring of 2013, the Yukon CDC improved public access to the data using a new web-based tool. A layer was added to the Yukon Mining, Lands, and GeoLocator viewers to display Yukon CDC data publicly. Now, anyone with an interest in knowing where they might encounter a species of conservation concern can go online and check the map. But, if the map outlines an area, they must contact the Yukon CDC to find out what species is there. This two-step process balances the needs of map users with the need to safeguard sensitive information about species of conservation concern. To explore for yourself, login to: **mapservices.gov.yk.ca/Lands/WebMap.aspx**.

Yukon Conservation Data Centre collects, manages, and applies detailed local information to assign conservation status ranks to Yukon species. The five-number ranking system ranges from Critically Imperilled (1) to Secure (5). This information permits effective tracking of the status and distribution of species in Yukon. Government agencies, First Nations, industry, academia, conservation groups, and the public can use the information to guide decisions about the management of Yukon's natural resources.

The Yukon CDC received at least 160 data requests in 2012, primarily for environmental assessment and land-use planning purposes. In addition, the Centre received almost 700 requests for information of various kinds. They came from 271 different individuals representing 123 organizations. More than half were from government, 94 from the general public, 75 from academic institutions, 48 from non-governmental organizations, 46 from businesses, 5 from First Nations, and 4 from municipalities.



Moose Habitat Assessment in Old Crow Flats

Biologists need to gather samples and affix the collar quickly and efficiently to minimize the amount of time the moose needs to stay immobilized. Oxygen is provided through a tube into the moose's nose, and the eyes are covered to protect them from the sun and debris.

For the last few years, Fish and Wildlife Branch personnel have been involved in a large ecological study centred around Old Crow Flats—both traditional use of the Flats and the area's future in a changing climate. Together with researchers from McGill University, they are trying to understand how moose use habitat within Old Crow Flats and to answer community concerns about moose "migration" or seasonal distribution.

Although moose probably favour drained lake basins and other areas with lots of shrubs, they also use the Flats' aquatic habitats. The question the researchers want to answer is how important each habitat and type of food is to moose.

Aerial surveys confirmed what local knowledge said: that moose are distributed all over the Flats. However, the movements of radio-collared moose showed important patterns of behaviour. Moose collared in the western portion of the Flats move north and west for the winter, some moose stay in the southeast corner all year long, and others move south and southeast for the winter. These different life histories suggest that these subpopulations should be managed differently.

Diet analysis showed that moose eat more willows than water plants in summer. Despite all the lakes and water plants on the Flats, it seems that willows and drained lake basins are more important to moose diet. A study of the nutrient value of the plants revealed no pattern of change that might cause the moose to move to other plants or other locations.

The last part of the study is currently underway: development of a Resource Selection Function (RSF) computer model to determine which habitats the GPS-collared moose use over the ice-free period on the Flats. When lakes drain, as more of them are likely to do in a warming climate, they tend to re-vegetate with willows. If moose spend more time in the lakes and ponds rather than in willow patches, their preferred summer habitat would become less common, and draining lakes might not be a good thing for moose. If moose spend more time in willow patches than in the water, their summer habitat would become more common, and draining lakes might be a good thing for moose.

Photo: Martin Kienzler

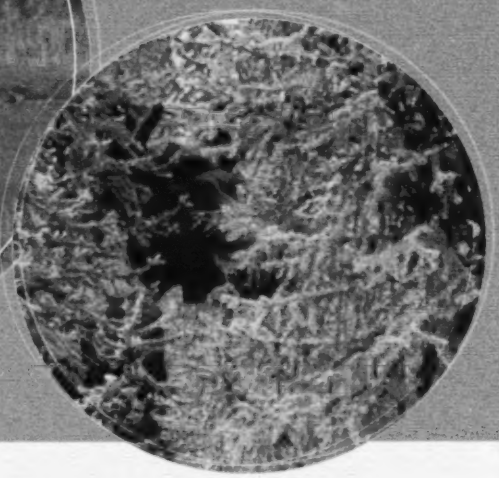


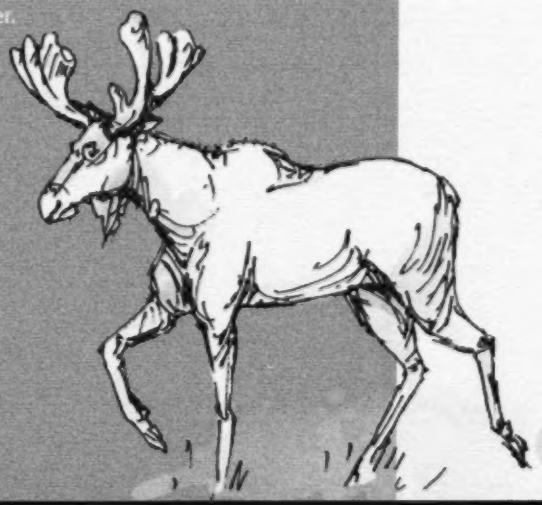
Photo: Brian Bell

The Vuntut Gwitchin First Nation (VGFN) leads the project—called *Yeendoo Nanh Nakhweenjit K'atr'ahanahtyaa*: Environmental Change and Traditional Use of the Old Crow Flats. It began as part of Canada's International Polar Year effort and involves academic researchers from several Canadian universities, as well as Environment Yukon and Parks Canada personnel.

The impetus behind the project was VGFN members' concerns about changing water levels in the Flats. The project goal was to examine how climate and the Flats have changed over the past several thousand years in order to help the Vuntut Gwitchin develop an adaptation plan for the future.

How do you watch a moose eat? The researchers came up with several approaches:

- Using GPS collars, they tracked 19 of the moose summering in the Flats and used the information to develop a computer-based model of which habitats moose prefer or avoid.
- A technique called stable isotope analysis determined how much of the moose's diet is aquatic vegetation and how much is terrestrial vegetation.
- Two aerial surveys gathered more information about the location of the moose.
- Seasonal growth analysis of water plants was used to discover whether moose switch food plants as the nutritional composition of the plants changes over the summer.



Wildlife Viewing Program

Environment Yukon's Wildlife Viewing Program grew out of the 1990 *Strategic Plan for Wildlife Viewing in the Yukon*. In 2012, Environment Yukon, in partnership with the Department of Tourism and Culture, developed a revised and condensed version: *Yukon's Wildlife: A strategy for developing and promoting viewing opportunities*. This condensed and concise document is designed mainly for internal discussion purposes, but is available to other governments, non-governmental organizations, First Nations, and Renewable Resource Councils to use as a guide when developing new wildlife promotion activities.

The Wildlife Viewing Program organizes several annual events over the year, including two major series: Wild Discoveries, held each year from June through September, and the Celebration of Swans, held every April since 1994.

Wild Discoveries

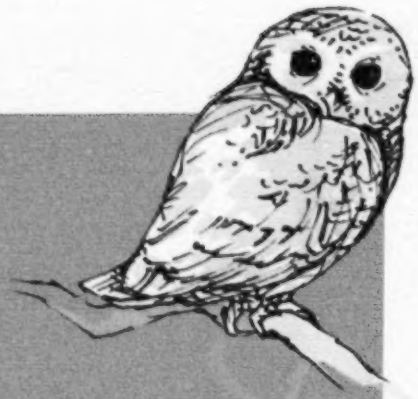
Wild Discoveries is a series of interpretive walks, talks, and events under the banner of the Wildlife Viewing program. Some events are organized directly by Wildlife Viewing. Others are organized by community partners. In 2012, 31 events took place, 27 of them organized and hosted by the Wildlife Viewing Program. Locations included Whitehorse, Haines Junction, Mayo, Keno, Dawson, Carcross, Teslin, Watson, Braeburn, and Faro.

Attendance varied in 2012. The most popular Wildlife Viewing Program event was the Chadburn Lake Bat talk, which attracted more than 30 people. A few events drew just a handful of participants, possibly due to competition from the multitude of summer activities in Yukon. Wildlife Viewing Program staff are looking at more effective ways of organizing and advertising Wild Discoveries for the 2013 season.

A Celebration of Swans

For the 18th year in a row, the Celebration of Swans drew thousands of people to Marsh Lake and other venues to admire and enjoy the migrating birds. During the 2012 festival period—April 14 to 22—2500 people came for the birds and a range of entertaining activities but left with greater awareness of the importance of early spring open water for migratory birds.

New events for 2012 included a Coffee House Music Jam night at Swan Haven, a Kids' Photography Workshop, Johnson's Crossing Swan Walk, and a French Trivia Night at L'Association franco-yukonnaise. Celebration of Swans events in 2012 took place in Whitehorse, Marsh Lake, Johnson's Crossing, Tagish, and Burwash Landing, and 18 different organizations either hosted or aided in the delivery of the programs.



Yukon Amphibians

In 2012, the Wildlife Viewing Program produced a completely new version of its guide to *Yukon Amphibians*. The brochure features original artwork by Lee Mennell, including a centre fold-out with actual-size drawings and an identification guide to the four frogs most commonly found in or near Yukon.

The brochure actually allows you to hear some Yukon amphibians as well as see them. QR (Quick Response) codes have been included for the wood frog, the western toad, the Columbia spotted frog, and the boreal chorus frog. All you need is a smart phone and decoding software to hear spring frog song all year round.

Yukon Amphibians is available in print and online at:
www.env.gov.yk.ca/animals-habitat/amphibians.php

Mammals!

The Wildlife Viewing Program revamped and updated all the Mammal pages on the Environment Yukon website in 2012. There are 49 shiny new pages of information, photographs, range maps, track guides, and sound recordings of the full range of Yukon mammals from shrews to whales, bats to grizzly bears. More links provide updates on the conservation status of the mammals and lead to other useful information, such as how to build a bat house or how to stay safe in bear country. To explore, the new Mammal pages, go to:
www.env.gov.yk.ca/animals-habitat/mammals.php

Goat Survey in the Itsi Range

The Itsi Range is home to Yukon's northernmost mountain goats. Harvest of the population is currently modest, but may change with a pending upgrade of the North Canol road to all-season access, and increasing exploration and mining activity has the potential to increase disturbance of the population. Distribution information is needed to refine Wildlife Key Area maps, which allow managers to evaluate potential effects of development on the goats.

In a July 2012 aerial survey, six goats were observed in two groups, all in game management subzone 11-01. No kids were observed. This was slightly lower than the number of goats spotted during previous surveys dating back to 1975, although the distribution of goats was similar. Given the small size of this population, any harvest of it may not be sustainable.

Dall's Sheep Monitoring Along the Yukon River

Small groups of Dall's sheep occur along the Yukon River near the confluences of the White, Stewart and Yukon rivers. This is not typical sheep habitat, and little is known about these groups. Given their small size and relative isolation, these groups might be particularly vulnerable to disturbance.

In August 2012, a field crew travelled by boat on the Yukon River to assess the feasibility of mapping sheep movements along the river and collecting fecal samples for DNA analysis. The crew confirmed the presence of sheep near the confluence of the Yukon and White rivers and the Yukon River and Ballarat Creek. However, the challenging terrain means detailed mapping will be extremely time-consuming. In addition, DNA in fecal samples degraded too quickly in the summer for effective analysis. If this approach is considered in the future, collection of winter fecal samples will be required.

Thinhorn Sheep Monitoring in the Ketza River Area

In the late 1980s, sheep populations near the Ketza River mine property were the focus of a relatively comprehensive population and habitat study. In 2007, an aerial survey suggested mining activity might have affected the animals' habitat selection. With the potential reopening of the Ketza River mine, current information is needed about local sheep populations.

In a June 2012 aerial survey to document lambing areas, Environment Yukon personnel observed 121 sheep and identified a number of previously unknown lambing areas. A post-lambing survey in July recorded 113 sheep, with a lamb:nursery sheep ratio of 23:100. The heavy snowpack persisted into July at high elevations last year, which may have kept animals at lower elevations in more heavily forested areas. As a result, the surveyors did not see many ram groups.

The deep winter snow might also be the cause of the lower-than-average lamb recruitment.

Klaza Caribou Studies

With renewed claim-staking activity and ongoing mining operations in the Klondike Plateau area, there is a need for current information on the size, status, distribution and range use of the Klaza caribou herd. In September 2012, Fish and Wildlife personnel conducted an aerial composition survey of the herd to estimate the adult sex ratio and calf recruitment. Immediately following the survey, they attached GPS radio-collars to 26 adult cows. Four cows had already been collared the previous February.

The fall composition survey yielded a calf:cow ratio of 14:100, and an adult sex ratio of 27 bulls per 100 cows. Warmer-than-average temperatures in late September may have delayed the onset of breeding aggregations, resulting in fewer bulls being observed on the breeding ranges and a biased low sex ratio. A formal population estimate in late October pegged the size of the herd at 1180 caribou. The radio collars are currently delivering detailed information about the animals' movements and the spatial distribution of caribou in the herd.

Greater Nahanni Caribou Project

This was the final year of a five-year program looking at the seasonal distribution, number, and status of caribou in the Greater Nahanni area. The project was a response to increasing industrial development, the relative accessibility of these herds, and indications of declining populations.

Over the course of the project, Fish and Wildlife Branch personnel have tracked the distribution and movements of 30 radio-collared cows, estimated the size of the South Nahanni herd, and conducted fall composition surveys on both the South Nahanni and Coal River herds. The latest size estimate of the South Nahanni herd is 2100 animals. Given the 2001 estimate of 1430 animals, the herd is likely stable and possibly increasing, although a formal trend is difficult to determine because of differing survey coverage between the two years.

Reports describing the population and habitat ecology of caribou in the Greater Nahanni ecosystem are being prepared. The population information will be used to evaluate herd status and support harvest management planning and assessment. Distribution information will be used to evaluate potential effects on caribou of development in the region.

Southern Lakes Grizzly Bear Study

Photo: Eric Bonnett

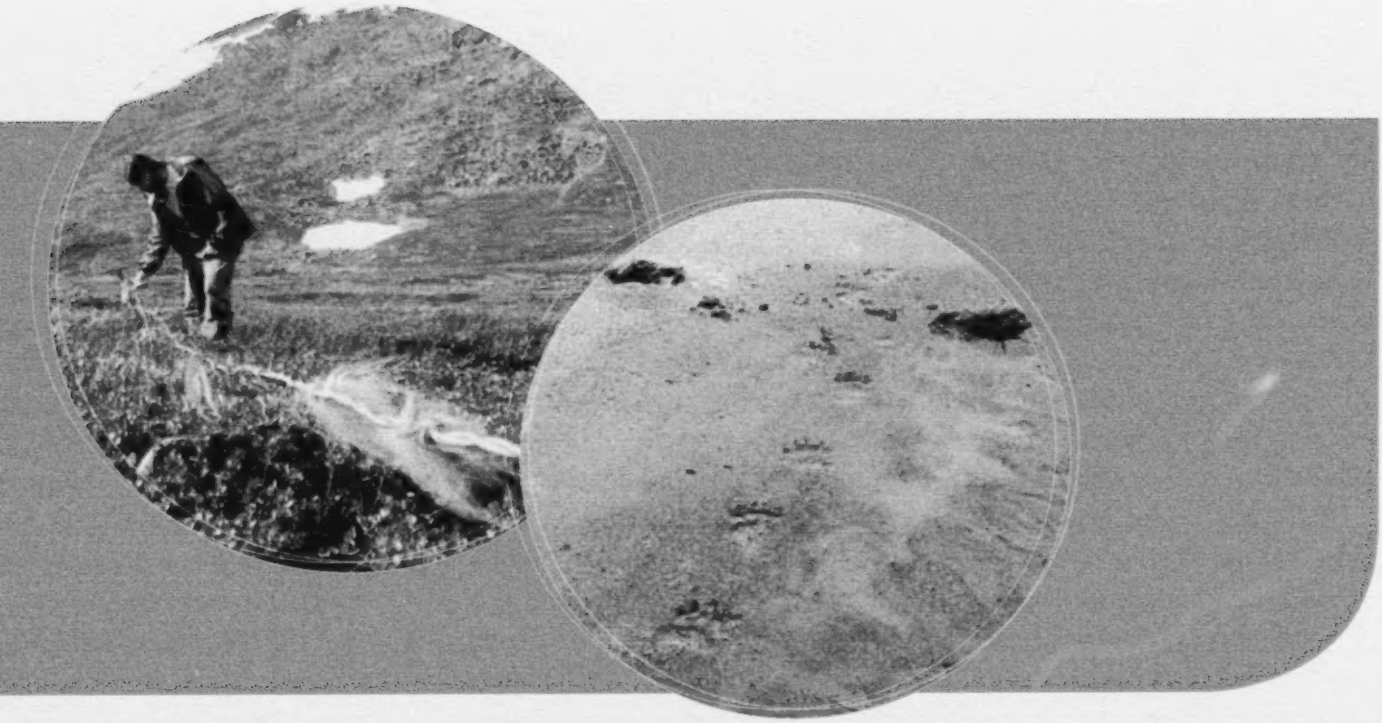
Environment Yukon's Carnivore Unit has been studying grizzly bears in the Southern Lakes region since 2009, in collaboration with the area's First Nations. The study area covers the important grizzly bear ranges between Tagish Lake and Kusawa Lake, from the Alaska Highway south to the British Columbia border. The goals are to estimate the size of the grizzly bear population, its nutritional status, habitat use, the ages of bears, home range size and movements, and survival and reproductive rates.

Carnivore Unit personnel use GPS and VHF collars to track the bears' movements, learn about habitat use, and monitor survival. When they capture the bears to fit the collars, they also take the opportunity to collect as much information as possible. They remove a premolar tooth for aging, apply lip tattoos for future identification, collect hair, fat and fecal samples for DNA and dietary analysis, and take blood samples. Whenever possible, bears are also weighed and measured.

Four new bears were collared in 2012, and two were re-collared. By denning time in the fall, there were 10 active collars in the study area: four females and six males. Five collars were retrieved over the season, including one from a bear that was killed illegally and one from another bear suspected to have been killed illegally. Hair samples have been sent for analysis to confirm whether this was a study bear. In addition, two collared bears were translocated out of this population.

In 2012, a new tool was added to the study's arsenal: the hair snare station. Stations consist of a double-strand barbed wire, suspended in a triangular shape around trees or rebar poles. Liquid bait is placed in the centre of the station. When the bears go after the bait, small samples of hair are snagged on the barbed wire. Analyzing DNA from the hair samples provides information about the density of bears in the study area and how the bears are related.

Altogether, the researchers obtained 2,085 hair samples from a total of 170 stations. Based on visual identification, they estimate that about 1,394 samples came from grizzly bears. The rest are thought to be black bear, wolverine, fox, porcupine and domestic dog. The actual number of grizzly bear samples will be confirmed through lab analysis. The hair samples, as well as other DNA samples, are being processed over the study period.

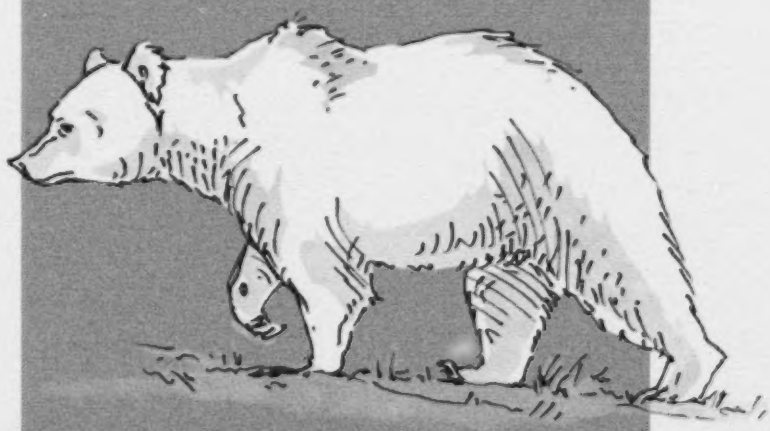


Public participation is an important part of the Southern Lakes Grizzly Bear study. Members of the public were invited to collect bear scats and submit them to Environment Yukon. Scats were also obtained from the Carcross-Tagish First Nation and Ta'an Kwäch'än Council. The scats provide valuable information about what the bears are eating in different areas at different times of the year.

The public has also reported bear sightings to assist with trapping. All bear sightings are logged by the Conservation Officers Services Branch and provided to the Carnivore Unit. Carnivore Program staff have invited people to send photos or emails about sightings of any collared bears. In 2012, the program received numerous emails about the whereabouts of some of the study bears, many with photos attached.

The public is also asked to report den sightings. The Carnivore Unit produced both a poster and a flyer to assist people in identifying dens. Two dens were reported by the public in 2012, although they have not yet been verified.

The Southern Lakes Grizzly Bear Study was undertaken in response to a couple of concerns. One was the high incidence of human-bear conflicts in a region that is home to the bulk of the Yukon's human population. Reported human-caused mortality of grizzly bears in the Southern Lakes region is believed to be significantly higher than sustainable for the size of the bear population. In addition, regional boards and councils wanted information on the relationship between bears and ungulate species, such as moose and caribou—specifically, the role ungulates play in the bears' diet.



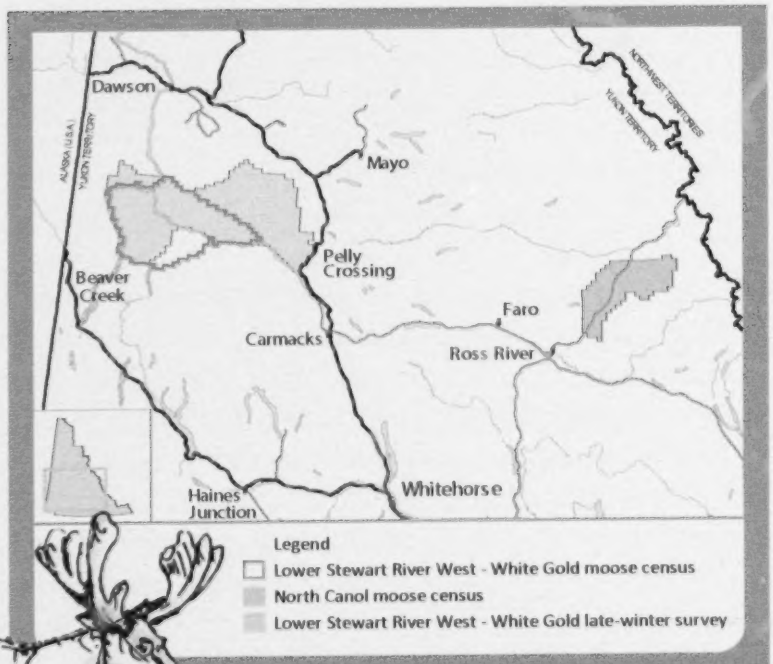
Three Moose Surveys Conducted in 2012

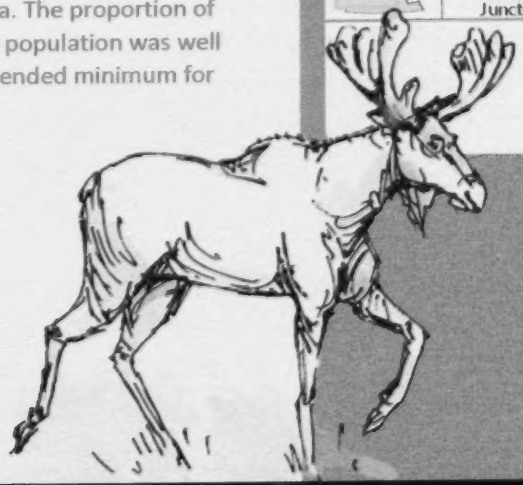
Every year, the Fish and Wildlife Branch conducts moose surveys in high priority areas. In 2012, we conducted two census surveys to estimate population parameters. These surveys are flown by helicopter in November when moose concentrate in high-elevation open habitats. Bull moose still have antlers at this time of year, which allows us to estimate the ages and proportion of bulls in the population. In addition, we flew one fixed-wing late-winter "stratification" survey to map important habitats during a time when moose restrict their movement and habitat use to conserve energy.

The Lower Stewart River West – White Gold area was identified as a high priority because of the level of advanced mineral exploration and the proposed development of several new mines and associated all-season access roads. An inventory of moose in the area also was recommended in the *Community-based Fish and Wildlife Management Work Plan for the Na-Cho Nyäk Dun Traditional Territory (2008-2013)*. We conducted a census survey between October 30 and November 17 that included the western part of the Lower Stewart River Moose Management Unit and the northeastern part of the White River Moose Management Unit, covering an area of about 6,751 km^2. This was the first count of moose in the area and density was slightly higher than Yukon average. Calf survival was poor in 2012, but calves born in 2011 had average survival for the area. The proportion of mature bulls in the population was well above the recommended minimum for cows to be bred. Harvest in the entire area appears to be near the maximum recommended rate and particularly high in the area of the Stewart River's confluence with the Yukon River.

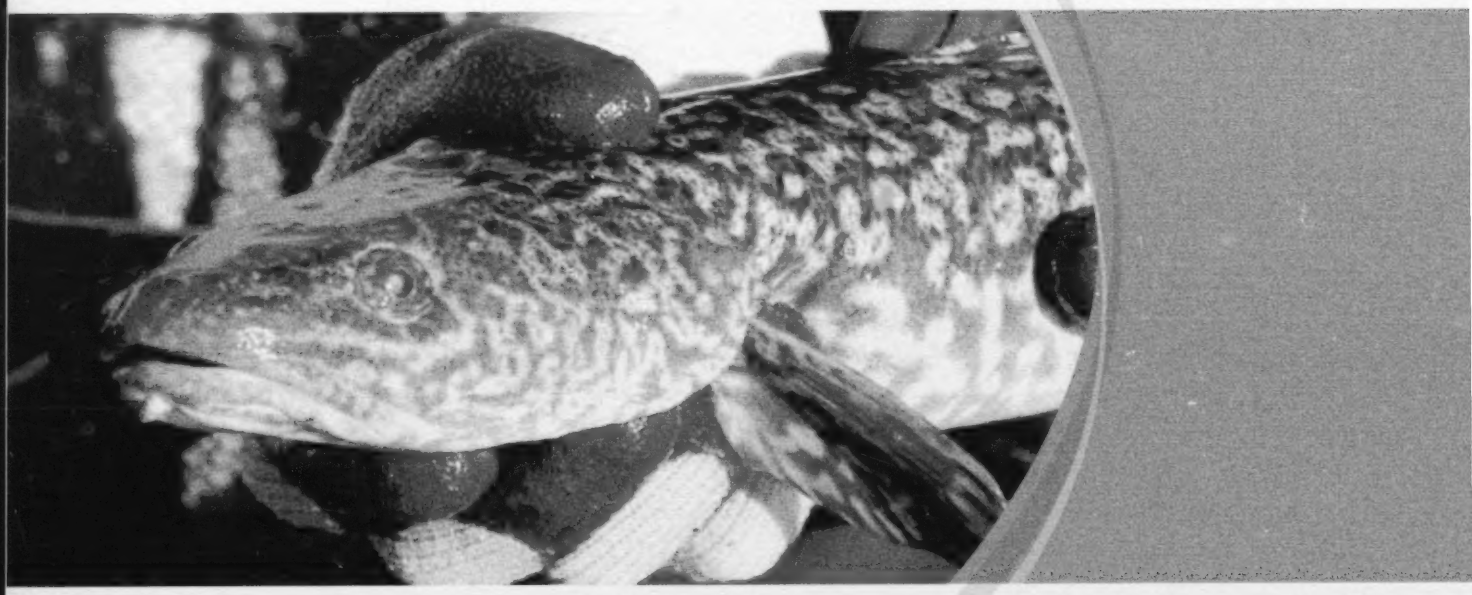
The late-winter survey overlapped the Lower Stewart River West – White Gold census area but also included additional surrounding areas with high levels of recent mineral staking and few data on moose distribution. In total, we surveyed 11,490 km^2 and found moose to be widely distributed across the survey area, with more seen in the western half, mainly in willow-rich habitats in recently burned areas, open forest, and along creeks and rivers. The biggest concentrations were in habitat burned between 1989 and 2004, especially between the Yukon and White rivers, the Mount Stewart area, and east of Pyroxene Mountain.

The second moose census covered an area of about 3,239 square kilometres in the North Canol Area, a popular moose-hunting area with the potential for significant hunter pressure. The area was previously surveyed for moose in 1987, 1991, 1996, and 2001. Moose density in 1991 almost doubled after wolf reduction in the area, but numbers now appear to have stabilized near pre-control estimates. Moose density in the area was above the Yukon average and had not changed from 2001. Calf survival in 2012 was near the minimum required to maintain a stable population, but calves born in 2011 had average survival for the area. The proportion of mature bulls in the population was well above the recommended minimum for cows to be bred.





Burbot Studies Reveal a Problem in Pine Lake



Environment Yukon's fisheries biologists have developed a method for estimating the abundance of burbot in Yukon lakes. In 2012, they tested the method in Pine Lake, near Haines Junction, with surprising results.

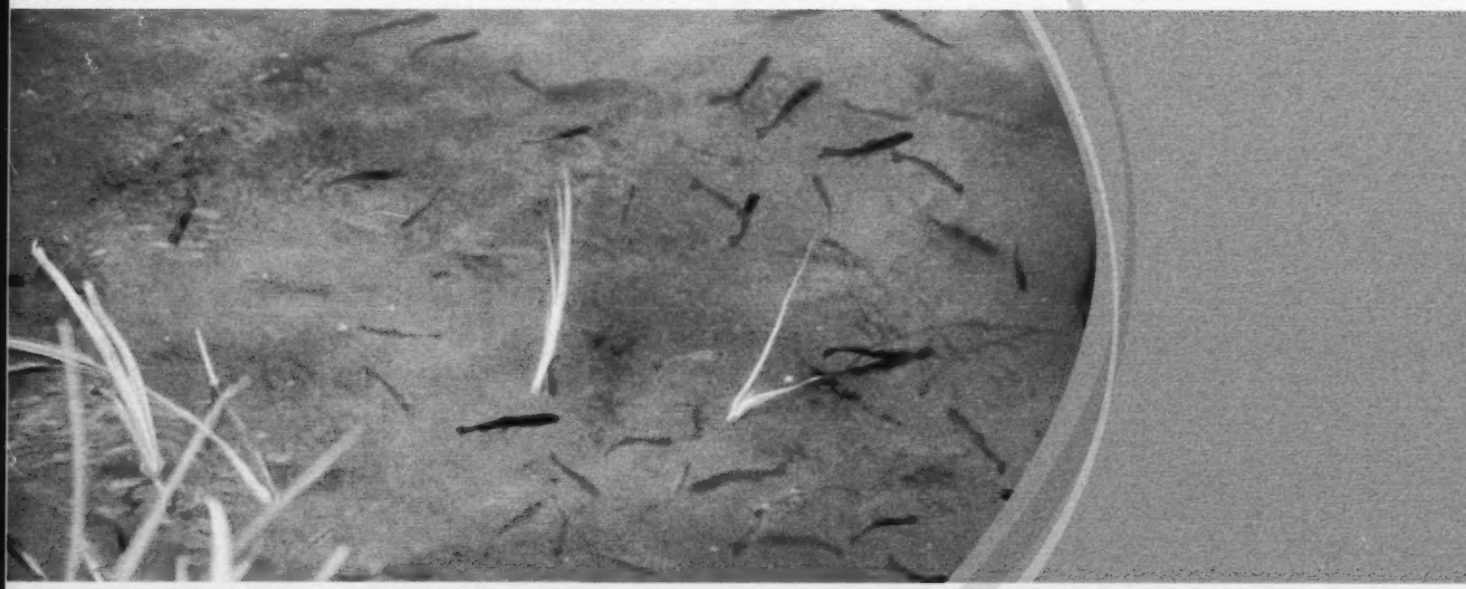
Burbot—also called lingcod, ling, maria, or loche—are bottom-dwellers, feeding at night mainly on fish, aquatic insects, crustaceans, plankton, and fish eggs.

Biologists used a technique called mark-recapture. This involves catching, marking, and releasing a known number of burbot. The marked burbot are given enough time to mix thoroughly with the rest of the population. Then, Environment Yukon personnel return to catch burbot again and examine the captured burbot for marks. The proportion of marked burbot in the recapture sample, compared to the number of burbot marked in the first capture event, provides a formula for estimating the total number of burbot in the lake.

In Pine Lake, the total indicated by these techniques was lower than expected for a lake of its size and productivity. That finding confirmed angler reports that fewer burbot are being caught in Pine Lake than in the past. The best estimate of the current Pine Lake burbot population is about 1,200 adult burbot. In addition, burbot body condition declined over the summer, suggesting poor foraging conditions in Pine Lake over this period.

To give the Pine Lake burbot population a chance to recover without depriving Yukon anglers of a favourite fish, Environment Yukon is no longer issuing set line permits for Pine Lake. Set lining allows anglers to easily harvest burbot on waterbodies that can sustain the extra harvest pressure, and is not appropriate for lakes where burbot populations are low. Anglers will still be able to fish for burbot with standard angling gear and with no change to daily limits. It is hoped that reduced burbot harvest in Pine Lake will result in increased burbot abundance in future years.

Fish Stocking at Hidden Lakes



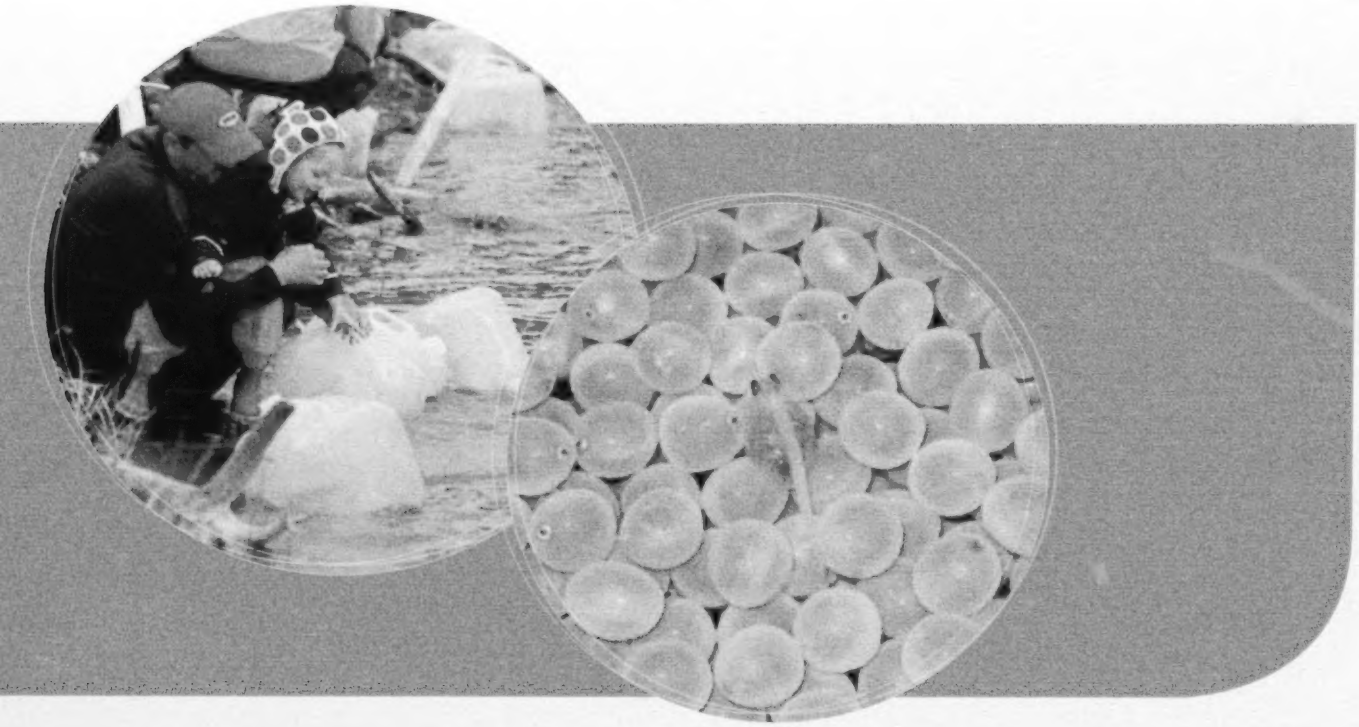
Every year in late May, Fish and Wildlife Branch staff invite the public to help stock Hidden Lakes, near Whitehorse, with rainbow trout and kokanee salmon. It's a great chance for everyone to watch spring unfold: The ice is just off the lakes, birds are returning, and things are just starting to green up. Community involvement in the stocking program also helps boost a sense of stewardship for the fish and the Hidden Lakes area.

In 2012, staff and volunteers released 10,500 rainbow trout fry into Hidden Lake 1. These fry came from eggs laid in spring 2011 at the Whitehorse Rapids Fish Hatchery. The fry were raised at the hatchery to a weight of 2-5 grams at the time of release. The rainbow trout fry are descended from Yukon-origin rainbow trout, collected from Kathleen River in southwest Yukon.

On May 26, 2012, families gathered at the Hidden Lakes parking lot, and Environment Yukon fisheries biologist Oliver Barker gave a short talk on the Stocked Lakes Program. Then, parents and older kids helped carry fry in buckets from the large truck tank in the parking lot to the lake shore, about 200 metres down a forest trail.

Once at the lake shore, kids put spruce boughs in the water to provide a short-term hiding place for the released fry. This helps them avoid predators—both birds and fish—while they adjust to their new home. Barker then distributed plastic bags to everyone, and all the kids (and some adults) had a chance to fill their bags with water and fry. After letting the fry acclimate to the temperature of the lake, participants released them.

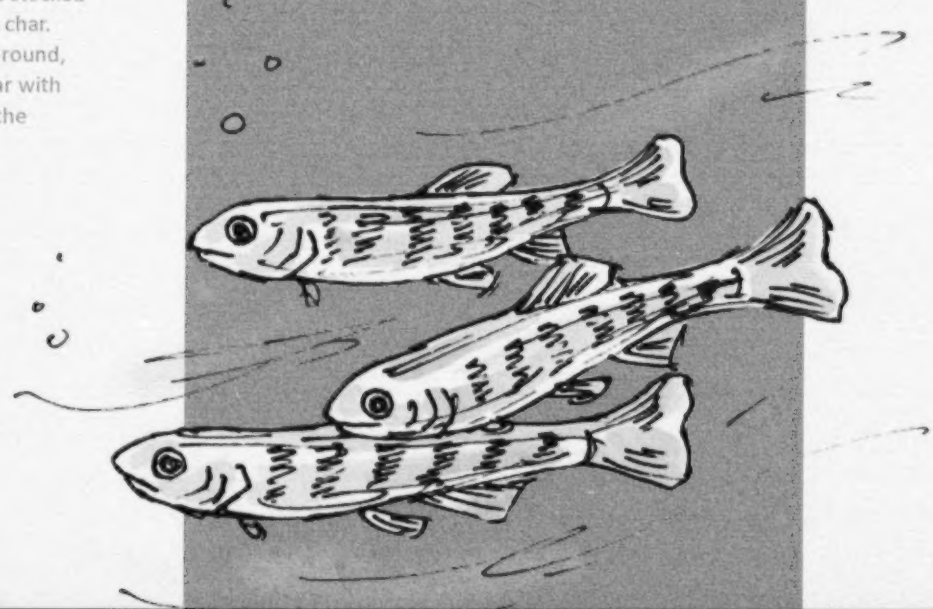
The event drew about 55 participants to help stock the lake. Local media also showed up, providing both radio and newspaper coverage.



The Hidden Lakes are located across the bridge from downtown Whitehorse, behind the Riverdale subdivision. A short side road off the Chadburn Lake Road leads to Hidden Lake 2, and a trail provides foot access to the other two lakes.

Only lakes 1 and 3 are stocked, since Hidden Lake 2 is too shallow for fish to survive the winter. Hidden Lake 1 is stocked with rainbow trout and kokanee, and Hidden Lake 3 is stocked with rainbow trout and Arctic char. Both lakes can be fished year-round, but they are especially popular with Whitehorse residents during the spring ice-fishing period.

Over the past 30 years, Environment Yukon has released hundreds of thousands of fish into pothole lakes for the enjoyment of Yukon anglers. Currently, 20 lakes are stocked with rainbow trout, Arctic char, kokanee salmon, or bull trout. Besides providing good fishing, stocked lakes take angling pressure off slow-growing wild fish species such as lake trout. Information about the Stocked Lakes program is available at:
www.env.gov.yk.ca/hunting-fishing-trapping/stockedlakes.php



Technical reports

Anyone interested in more information about results of Fish and Wildlife Branch programs and projects can find it online at: **www.env.gov.yk.ca/publications-maps/plansreports.php**. In 2012, 33 new reports were added to our growing catalogue of publications. Every report starts with a brief summary of the project and key findings, for those readers wanting a quick look at what we learned.

- Angler harvest survey: Bennett Lake 2009
- Angler harvest survey: Ethel Lake
- Angler harvest survey: Frances Lake 2009
- Angler harvest survey: Lake Laberge 2007
- Angler harvest survey: Little Atlin Lake 2008
- Angler harvest survey: Marsh Lake 2007
- Angler harvest survey: Nares River 2009
- Angler harvest survey: Tagish Bridge 2007
- Assessment of Arctic grayling populations using snorkel surveys: Lubbock River, 2010
- Ecologically sustainable carrying capacity for elk in the Braeburn Herd range, Yukon
- Flat Creek Wetlands: Preliminary habitat assessment
- Knowledge-based habitat suitability modeling standards and guidelines
- Lake trout population assessment: Caribou Lake
- Lake trout population assessment: Dezadeash Lake 1995, 2001, 2006
- Lake trout population assessment: Ethel 2011
- Lake trout population assessment: Fish Lake 2010
- Lake trout population assessment: Lewes Lake
- Lake trout population assessment: Louise Lake 2011
- Lake trout population assessment: Sekulmun Lake 2010
- Lake trout population assessment: Snafu Lake 2010
- Lake trout population assessment: Tarfu Lake 2010
- Lake trout population assessment: Tatlamain 2011
- Late winter habitat selection by Forty Mile caribou in the Dawson region
- Late winter habitat selection by sheep in the Dawson region
- Lichen assessment: Chisana caribou range 2011
- Local knowledge-based moose habitat suitability assessment - S. Canol
- M'Clintock early-winter moose survey 2011
- Moose survey: Nisutlin South early winter 2010
- Moose survey: Dawson early winter 2008
- Moose survey: Faro early winter 2011
- Moose survey: Mayo moose management unit early winter 2011
- Moose survey: Tatchun moose management unit, late winter 2011
- Moose survey: Upper Klondike moose management unit, late winter 2010
- Moose survey: Whitehorse North, late winter 2011
- Wood Bison: Population inventory of the Aishihik herd in southwestern Yukon

A tragic helicopter crash occurred on July 10, 2012 while conducting field work on a wildlife project in southwest Yukon. Our hearts and thoughts go out to the victims, and family and friends of those affected.